

CLAIMS

What is claimed is:

Claim 1. Anti-cancer antibodies or fragments thereof produced in accordance with a method for the production of individually customized anti-cancer antibodies which are useful in treating a cancerous disease, said antibodies comprising:

a subset of antibodies or fragments thereof characterized as being cytotoxic against cells of a cancerous tissue, said subset being essentially benign to non-cancerous cells.

Claim 2. The anti-cancer antibodies or fragments thereof in accordance with claim 1 wherein the cytotoxicity of said antibodies is mediated through antibody dependent cellular toxicity.

Claim 3. The anti-cancer antibodies or fragments thereof in accordance with claim 1 wherein the cytotoxicity of said antibodies is mediated through complement dependent cellular toxicity.

Claim 4. The anti-cancer antibodies or fragments thereof in accordance with claim 1 wherein the cytotoxicity of said

1 antibodies is mediated through catalyzing of the hydrolysis
2 of cellular chemical bonds.

3

4 Claim 5. The anti-cancer antibodies or fragments thereof
5 in accordance with claim 1 wherein the cytotoxicity of said
6 antibodies is mediated through producing an immune response
7 against putative cancer antigens residing on tumor cells.

8

9 Claim 6. The anti-cancer antibodies or fragments thereof
10 in accordance with claim 1 wherein the cytotoxicity of said
11 antibodies is mediated through targeting of cell membrane
12 proteins to interfere with their function.

13

14 Claim 7. The anti-cancer antibodies or fragments thereof
15 in accordance with claim 1 wherein the cytotoxicity of said
16 antibodies is mediated through production of a conformational
17 change in a cellular protein effective to produce a signal to
18 initiate cell-killing.

19

20 Claim 8. The anti-cancer antibodies of claim 1 wherein:
21 said method of production utilizes a tissue sample
22 obtained from a particular individual containing cancerous
23 and non-cancerous cells.

24

25 Claim 9. Anti-cancer antibodies or fragments thereof
26 selected from the group consisting of a 3BD-3, a 3BD-6, a

1 3BD-8, a 3BD-9, a 3BD-15, a 3BD-25, a 3BD-26 and a 3BD-27
2 monoclonal antibody.

3

4 Claim 10. Anti-cancer antibodies or fragments thereof
5 produced by a hybridoma cell line having an ATCC Accession
6 Number selected from the group consisting of ().

7

8 Claim 11. Anti-cancer antibodies or fragments thereof
9 selected from the group consisting of a 1LN-1, a 1LN-12, a
10 1LN-14, a 2LN-21, a 2LN-28, a 2LN-29, a 2LN-31, a 2LN-33, a
11 2LN-34 and a 2LN-35 monoclonal antibody.

12

13 Claim 12. Anti-cancer antibodies or fragments thereof
14 produced by a hybridoma cell line having an ATCC Accession
15 Number selected from the group consisting of ().

16

17

18

19

20

21

22

23

24

25

26